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AUTHOR	Goddu, Roland
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ABSTRACT

The concepts of educational research, development, and dissemination can be examined and defined so that a framework in which the relationship of each to adaptation, documentation, and evaluation can be visualized. Using the Teacher Corps Projects, a component of the federal research and development effort, as a concrete example, it can be seen that its demonstration functions are in actuality a form of dissemination of educational innovation. In any Teacher Corps project, three cycles must occur: adaptation (site-specific arrangement of the process or product); documentation (recording of events during adaptation and implementation); and evaluation (measurement of documented effects against expected outcomes). These cycles occur constantly, not only during dissemination, but also during research and development. In research, the adaptation cycle is synonymous with hypothesis generation; documentation may be called experimentation; and evaluation is called validation analysis. In development, the cycles are called invention, field testing, and summative analysis, respectively. Since the key function of dissemination is to make research and development information known in a useable form, projects such as the Teacher Corps support the research and development efforts when they describe how they adapt, demonstrate, analyze, and judge the innovation. By examining such projects it can be seen what works in classrooms to improve the quality and relevance of education. (MB)

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ADAPTATION, DOCUMENTATION, EVALUATION: WHERE DO THESE CONCEPTS FIT IN EDUCATIONAL RESEARCH, DEVELOPMENT AND DISSEMINATION

Roland Goddu

New England Program in Teacher Education
Box 550
Pettee Brook Offices
Durham, New Hampshire 03824

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ADAPTATION, DOCUMENTATION, EVALUATION: WHERE DO THESE CONCEPTS FIT IN EDUCATIONAL RESEARCH, DEVELOPMENT AND DISSEMINATION - Roland Goddu

A. In search of context

Since Teacher Corps has primarily been a teacher education program, one can wonder where the research connection comes from. James Steffensen provides a very helpful and insightful history in the Summer 1975 issue of the Journal of Teacher Education. In summary, he develops a view of how the Teacher Corps has from its inception sought

> to improve the quality and relevance of education primarily through research, development, experimentation demonstration, dissemination and training activities.

In one key paragraph, he describes how the Teacher Corps has sought to identify, test, and spread useful innovations for the education of disadvantaged children.

> Teacher Corps affirmed that improved teacher education would be the way to introduce innovations [into classrooms]. This occured when Teacher Corps reviewed the specifications for the teacher training models developed in ten institutions through Office of Education research funds. The decision was then made - and this decision has had significant impact upon the direction of Teacher Corps as well as other HEW training programs - to use those specifications to systematically mesh theory and reality into an integrated, data dependent, field-based program - i.e., a Teacher Corps project site.

Then he goes on to assert that Teacher Corps has expanded its program to provide

> demonstration sites designed to show methods in which effective preparation and re-training of teachers for educationally excluded children could be accomplished.

So there: Teacher Corps is a component of the federal research and development efforts with a focus on demonstration of effective innovations: (a) innovations

in classroom practices and (b) innovations in training methods, with a focus on particular sites: (a) Teacher Corps projects and (b) schools with a significant number of educationally excluded children.

B. In search of definition

One then wonders what a demonstration from an educational research and development may well be. Two interesting documents assert some definitions: (1) Educational Research and Development in the United States (DHEW/OE - December 1969) and (2) Building Capacity for Renewal and Reform (NIE - December 1973). Both documents discuss concepts of research and development.

- The objective of research activities is to discover, reinforce or refine knowledge. (1)
- The objective of development activities is to produce materials, techniques, processes, hardware, and organizational formats for instruction. (1)
- The process associated with development generally includes the following stages: specification of objectives, initial design, prototype construction, several stages of testing, final design, large scale field testing, summative evaluation, and, if appropriate, production. (2)
- It is this key function of making information about research and development available in usable and effective forms to which the term dissemination is applied. (1)
- A more familiar form of dissemination is the demonstration, an instance of a particular innovation in operation. (1)

So a Teacher Corps Project activities are the instances of a particular innovation in operation, i.e., a demonstration. A Teacher Corps project takes some practice which has moved through the research and development stages to a stage where it can/might/should be disseminated in usable and effective form. The project itself is the device for dissemination, it shows that an innovation works in a particular setting.

Further, a demonstration can be one of three sequential types of adoptions: trial, installation, or institutionalization. For each type (trial, installa-

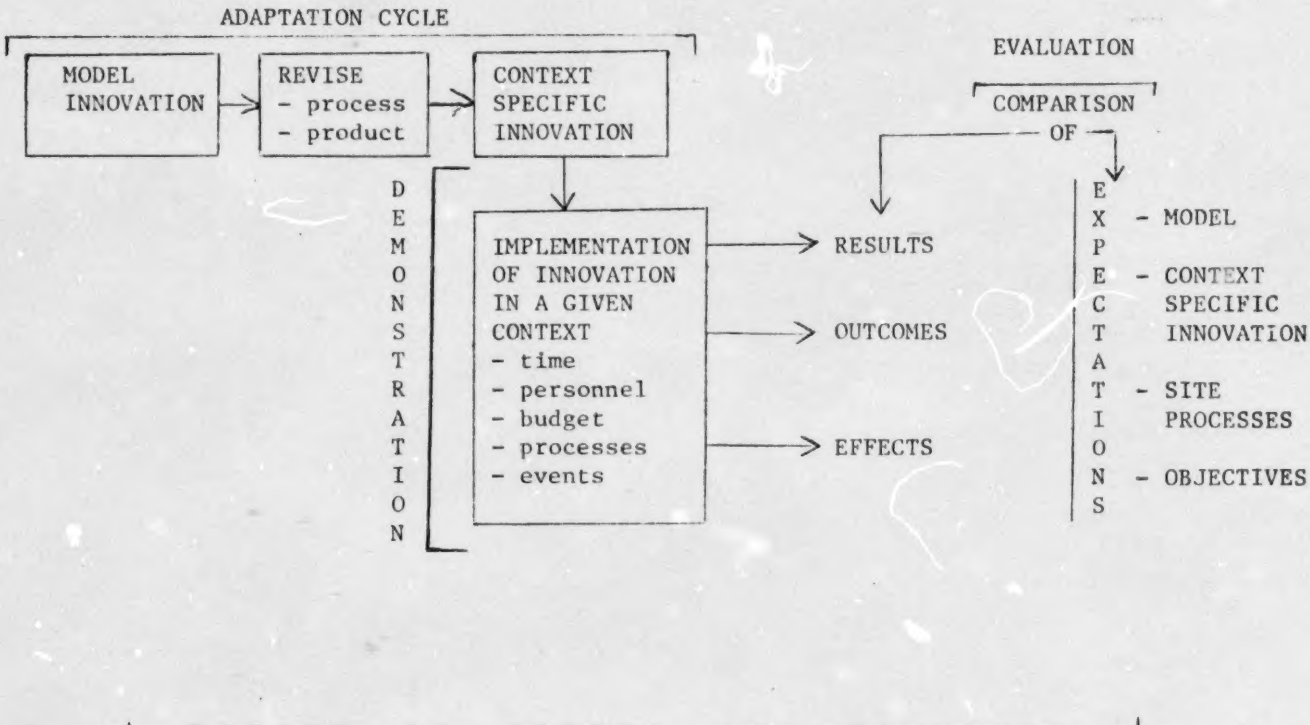
tion, institutionalization) an adaptation, documentation and evaluation cycle must occur. And to move from type to type requires recycling of the adaptation, documentation, and evaluation cycle. Each time, the innovation is adapted: the developed process or product is arranged, amended or modified in such a way that it fits the site and can operate at the site as a demonstration. The innovation is documented; the events that occur during adaptation, and then implementation, the processes that are used for managing, adapting, implementing, the outcomes that result from all the activity of the demonstration are tracked and recorded. The innovation is evaluated; the documented effects of the actual operation of the demonstration are described and measured against expected outcomes and know characteristics of the innovation. The more accurate the record of the adaptations made to the process and product of the innovation that had come through from the research and development stages, the more significant the insights about the validity of the innovation tested in this particular site (project). The more complete the record of the expected and actual outcomes in the site in terms of learner change, organization change, curriculum change the more credible the demonstration as an actual instance of a trial, installation and then institutionalization of an innovation in operation.

For Teacher Corps Projects adaptation relates to planning phase in the trial, installation or institutionalization of an innovation in a real setting. Documentation relates to the operations phase and covers adaptation activities and evaluation activities as well. Evaluation relates to the judgment phase. Adaptation asks the question - what changes need to be made to an innovation to make it work here? Documentation asks the questions - what is happening, not happening? what is changing as time goes on? what is not changing? Evaluation asks the

questions - were the results as expected? were they valuable? Adaptation assumes pre-defined objects to be accommodated - the innovation and the setting. Documentation assumes pre-defined data collection-instruments and processes. Evaluation assumes pre-defined expectations - of the quality of the outcomes and of the demonstration process itself.

One can conceptualize the demonstration as follows:

Table I: Model of Adaptation, Documentation and Evaluation Events



The adaptation, documentation and evaluation cycle occurs constantly in not only during dissemination, but also development and research. One could present the activities which indicate the presence of one or the other in a situation as follows:

Table II: Research, Development and Dissemination Activities

	Research	Development	Dissemination
adaptation	hypotheses generation	invention	adoption
documentation	experiment	field test	demonstration
evaluation	validation analysis	summative analysis	applicability feedback

In Teacher Corps Projects which are demonstrations; adaptation, documentation and evaluation are of the type described in the dissemination column. Since the key function of dissemination is to make information about research and development discoveries available in a usable and effective form, a project which as a demonstration presents a particular innovation in operation, also disseminates and supports research and development efforts when it describes how it adopted, how it demonstrated, how it analyzed and judged the applicability of an innovation in practice.

As a dissemination effort, the Teacher Corps Project needs a documentation process that traces not only the actual demonstration, the implementation of a known innovation (i.e. CBTE, Alternative School Staff Development, Prescription Teaching Training, IGE) but also how it was adapted: changed to make acceptable, changed to fit, changed in implementation and on what basis it was judged to be usable,

effective, impactful. Documentation requires some organized collecting of events and notes and minutes and decisions on some regular basis, Logs, Journals, reports, descriptive summaries, as well as surveys, pre-post tests, are useful techniques. Adaptation requires some listing of steps leading to deciding to act or implement - usually some or most of the following occur:

(a) review of state of affairs

(b) discussion of expectations to improve state of affairs

(c) discussion of characteristics of innovation that might improve state of affairs

(d) collecting information about what might work

(e) selection of innovation (idea, pattern, model, product) to modify

(f) draft modification of innovation

(g) review of revised innovation

(h) decision on applicability.

Evaluation requires a judgment. While this judgment may be sounder if all of the following are present, evaluations exist that include some but not all

(a) determine hunches to be examined

(b) determine expectations about results to improve affairs and about how to improve affairs

(c) determine what know process or product could improve affairs

(d) determine how information about all activities and results will be collected

(e) collect information (documentation)

(f) determine how information collected matches hunches, expectations, and known process or product

The key to evaluation is the ability to relate what is expected with what happens and what is inserted with what results. Developing understanding about

a demonstration of an innovation can best be encouraged when

- the innovation is known
- the changes made to the innovation for a given setting are known
- the expectations for using the innovation in a given setting are known
- the results of using the innovation in a given setting are known

Thus, others will learn from Teacher Corps what works in classrooms to improve the quality and relevance of education.

Selected Bibliography

(A) Educational Research and Development in the United States. HEW/USOE, December 1969.

(B) Building Capacity for Renewal and Reform. HEW/NIE, December 1973.

(C) Ronald G. Havelock, Guide to Innovation in Education, Center for Research on Utilization of Scientific Knowledge, University of Michigan, Ann Arbor, Michigan, 1970.

(D) Herbert J. Klausmeier. "A Decade of Federally Supported R & D and a Related Proposal for Change," Journal of Teacher Education, Vol. XXVI, No. 2, Summer 1975, 163-165.

(E) James P. Steffensen. "Teacher Corps: A Nervous Decade of Educational Innovation," Journal of Teacher Education, Vol. XXVI, No. 2, Summer 1975, 110 and 111.

(F) Trumbull, Brenda J. and others. Promoting Change in Schools - A Diffusion Handbook, Far West Lab for Educational Research and Development, San Francisco, Calif., 1974.